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SERVICE NEWS

PUBLISHED BY THE SOIL CONSERVATION SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE

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February 6, 1940

There is an old saw to the effect that you get what you pay for. In this timely article H. H. Finnell applies the adage to the Soil Conservation Service program.

WHAT'S THE JOB WORTH?

By H. H. Finnell

Conservator, Region Six

The value of soil conservation practices as a permanent safeguard of natural resources of the Nation, as well as immediate returns to the individual, must be considered in figuring costs of planning and technical assistance.

A conservation program designed to put 15 cents worth of effort on an acre is a total loss if the purpose is not accomplished, whereas a complete coordinated conservation program with \$3.00 worth of effort to the acre is highly profitable in comparison, if it returns a value of \$3.00 or more.

At the same time the fertility of the land, its ability to respond to husbandry, represents a value far greater than any sale price which may have been attached because the maintenance of this fertility represents the maintenance of opportunity to individuals and of production capacity to the Nation.

Even under exploitive methods of operation, most land yields its value many times over during the process of destruction. Returns which the owner derives from destructive exploitation may represent a return of his investment, but to his successors they represent nothing. The irreparable losses are the losses most important to

Benton, Miss Mildred

society and to national economy, because they aggregate far more than the losses to any present landowner during his lifetime.

Individual experiences, showing not only equivalent returns on conservation practices, but also high profits, are multiplied by hundreds.

Even mass statistics, including results of all Soil Conservation Service efforts, good, bad, and indifferent, show accomplishments on the land in five years' time equal to from five to 27 times as much as that brought about by all combined previous efforts on the same land from 25 to 35 years before conception of the Service program.

Combined efforts on 4,335 farms in Region Six during the 25 to 35 years prior to conception of the Soil Conservation Service program, had resulted in adapted crop rotations on 111,000 acres including 5,000 acres of strip cropping and 12,000 acres of terracing.

Five years of intensive effort by the Soil Conservation Service on these same farms since that time has increased adapted crop rotation five times to 579,000 acres, strip cropping 25 times to 257,000 acres, and terracing 27 times to 329,000 acres. For the first time in the agricultural history of this area, inferior and erosion-damaged lands are being retired from cultivation to a planned use for hay, pasture, orchards or vineyards, woodland, or wildlife purposes consistent with existing capabilities instead of being completely exhausted and abandoned as a total loss. In other words, soil conservation under intensive Soil Conservation Service methods is being accomplished from 25 to 135 times as fast as under previous methods.

Skill developed from experience and improved facilities offer opportunities for increasing the effectiveness of the program. None of these should be overlooked, but the Service has nothing to gain, and the land and Nation can gain nothing by cheapening the work of the Service, or by spreading it so thin that it falls short of intensive application of complete programs to the land. Soil Conservation Service work has been effective partly because it has been concentrated.

DR. BENNETT POINTS OUT THAT EROSION CONTROL IS A COMMUNITY PROBLEM

"It is particularly significant at this time -- when much of the world is at war destroying priceless resources -- that America should strengthen the conservation movement," said H. H. Bennett in an address delivered at Trenton, N. J., on Jan. 26th, during New Jersey Agricultural Week.

We have plenty of land and plenty of resources, continued the Chief, yet our basic resource, the soil, is daily being wasted and damaged. We no longer have enough really good soil.

"Surveys of the Soil Conservation Service show that more than 50 million acres of cropland alone have been ruined for any immediate practical cultivation," said Dr. Bennett. "Another 50 million acres are bordering on the same condition ... About 60 percent of our present cultivated land is either subject to continued erosion or is of such poor quality as not to return a satisfactory income at present price levels."

Dr. Bennett pointed out that erosion in the State of New Jersey is not the spectacular kind to be seen in the Piedmont region of the South or in the Great Plains. But, he warned, erosion is present in a more insidious form -- moderate sheet and gully erosion and slight wind erosion. On more than 28,000 acres in the State, he said, soil has been essentially destroyed by sheet and gully erosion.

In discussing the need for thorough erosion control work on the farms of the country, the Chief said: "It is impossible for the Federal Government, or any other public agency, to do the job alone. It is impossible to expand the demonstration areas to cover the whole country. The soil conservation district may provide the solution."

In conclusion Dr. Bennett pointed out that the erosion problem is a people's problem, not another government responsibility. "Erosion is a force which can be controlled, to the material benefit of all," he said. "In our demonstration areas particularly and on thousands of farms outside those areas we have proved that beyond a doubt. It is the community duty of all of us to see that erosion IS controlled."

SCS REPORT SAYS HALF OF NATION'S LAND DAMAGED BY EROSION

Despite governmental conservation efforts, erosion is costing American farmers at least \$400,000,000 a year in soil depletion alone, H. H. Bennett pointed out in his annual report to Secretary Wallace. The Chief estimates that half of the land in the nation has been damaged by erosion.

"Across the farm and range lands of the country," Dr. Bennett said, "some 282,000,000 acres either have been ruined or severely damaged by soil erosion. On an additional 775,000,000 acres, the process of erosion is actively under way."

EXPERIMENTS ON EROSION CONTROL BY CROP RESIDUES ATTRACT ATTENTION

At the November meeting of the American Society of Agronomy, held at New Orleans, La., three papers dealing with results of experiments on soil and moisture conservation by crop residue retention attracted considerable interest. The experiments were under the supervision of F. L. Duley, research project manager at Lincoln, Nebr.

The papers presented were:

1. Relation of vegetation and plant residues to soil moisture conservation - by F. L. Duley and J. C. Russel.
2. Surface factors affecting the rate of intake of water by soils -- by F. L. Duley.
3. The effect of surface cover on soil moisture losses by evaporation -- by J. C. Russel.

The interest in the experiments on soil and moisture conservation was not confined to the Great Plains, where the work is being done. Men located in more humid sections of the country were interested in certain phases of the program, particularly those dealing with the intake of water and the possibility of using crop residues for erosion control.

The results of the experiments have attracted the attention of a number of farm machinery manufacturers interested in building machines for cultivating land without burying the residues that have been left on the surface.

LOUIS BROMFIELD TO BROADCAST ON EROSION

Louis Bromfield, well-known writer, discussed soil erosion in Ohio on the "Fortunes Washed Away" program over WLW on February 3.

Mr. Bromfield owns a farm in Ohio and is a cooperator with the Service.

BENNETT AND HOLT TO SERVE ON AMERICAN SCIENTIFIC CONGRESS

The Eighth American Scientific Congress will be held in Washington, D. C., May 10-18, 1940. H. H. Bennett, Chief, has been appointed chairman of the Committee on Agriculture and Conservation; Ernest G. Holt, chief of the biology division will serve as committee secretary.

Other members of the Committee are M. A. McCall of the Bureau of Plant Industry; J. L. Colom, chief of the division of agricultural cooperation of the Pan American Union; I. T. Haig of the Forest Service; and Knowles A. Ryerson, assistant dean of the college of agriculture, University of California.

Dr. Bennett is also a member of the Organizing Committee which is collaborating with the Department of State in formulating plans for the Congress.

The American Scientific Congress will be one of the important phases of the fiftieth anniversary celebration of the Pan American Union.

Dating from the first Latin American Scientific Congress, held at Buenos Aires in 1898, and undergoing change of name twice, the Congress serves as a medium for the exchange of scientific information of particular interest and importance to the governments and peoples of the Americas.

W. C. LOWDERMILK LECTURES ON CONSERVATION

W. C. Lowdermilk, assistant chief, will deliver a series of lectures in Region 2 during the first two weeks of February. He will discuss the findings of his recent study of erosion in various parts of Europe, north Africa, and the Near-East.

The Region 2 trip has been arranged by T. S. Buie, regional conservator, and will include Mississippi, Alabama, Georgia, North Carolina, and South Carolina. The first lecture was delivered at Biloxi, Miss., on February 1.

Dr. Lowdermilk will discuss erosion and conservation in the United States against the background of his observations abroad. He believes that United States conservationists can profit by the mistakes and achievements of the Old World agriculturists.

In Dr. Lowdermilk's words: "Never before have we taken thought and taken appropriate action to organize as a nation-wide undertaking the conservation of our most precious asset. What we are doing in the way of conservation is as important a discovery in the progress of civilization and in the progress of agriculture as was the discovery of fire by our primitive forefathers."

Dr. Lowdermilk has already lectured in the USDA auditorium at Washington, D. C., at Spartanburg, S. C., at Bridgeport, Conn., and at Yale University.

SPEECHES BY THE CHIEF

Dr. Bennett's schedule of addresses for the next month is tentatively as follows:

- Feb. 7. Southern Agricultural Association Meeting, Birmingham, Ala. "Proper Land Use and a Balanced Agriculture"
- Feb. 15. Broadcast on Farm and Home Hour, Land Use Series. "Some Outstanding Examples of Successful Erosion Control"
- Feb. 15. Association of American State Geologists Meeting, Washington, D. C. "Relation of Geological Survey to SCS"

Soil Conservation Service recently sustained a triple loss in the deaths of Guy Fletcher, State Coordinator for Louisiana; Robert Fechner, head of CCC; and F. A. Silcox of the Forest Service. All were enthusiastic conservationists.

After graduating from L.S.U. agricultural college in 1934, Mr. Fletcher was county agent in Louisiana for about 12 years. He came to the Service in 1935 and served as agronomist at Fort Worth, Tex., and Baton Rouge, La., before being appointed State Coordinator for Louisiana. Mr. Fletcher was recognized as one of the outstanding agricultural leaders in Louisiana and always sought to further agriculture and conservation in every way possible.

CONSERVATION PLANS TO BE EXTENDED TO PUBLIC DOMAIN

For some time past F. G. Renner, chief of the range conservation division, has been working with officials of the General Land Office, USDI, in an effort to develop a policy acceptable to both agencies whereby soil-and-water conservation plans may be extended to public domain areas under the jurisdiction of the General Land Office.

Chiefs of the two Bureaus have just signed a memorandum of understanding as a preface to developing a joint program for improving range conditions, erosion control, and a reduction in flood and sedimentation damage.

This program will be of particular importance in the West where there are still a considerable number of areas of public domain not included in grazing districts and still under the jurisdiction of the General Land Office.

It is expected that the project will be financed partly by funds made available by the G. L. O. and augmented by contributions from the individual lessees of these lands.

ELM CREEK AND DUCK CREEK PROJECTS IN TEXAS
CITED BY CHIEF AS OUTSTANDING EXAMPLES
OF CONSERVATION

"In this country we now have in abundance what nations in other parts of the world are fighting for, but we must also fight to protect our land," declared H. H. Bennett at the Texas Agricultural Workers' Association meeting at Dallas on January 12.

Uncontrolled wind and water, carelessness and ill-advised, antiquated farming practices were listed by the Chief as the foes against whom the fight must be waged.

"The watershed of Elm Creek, near Temple, boasts the largest solid block of conservation-treated farms in the country," said Dr. Bennett. "Working with technicians of the Soil Conservation Service, farmers in that watershed have established erosion control measures that are holding soil and rainfall on 165 adjoining farms, covering about 30,000 acres."

Declaring that conservation should have been started a century ago, Dr. Bennett said that more than half of the nation's land had been ruined or damaged by erosion.

As president of the Texas Agricultural Association, Louis P. Merrill, conservator for Region 4, opened the two-day session which was designed, he said, to coordinate agencies working for agricultural betterment.

"SOIL CONSERVATION" ITEMS

The wildlife issue of Soil Conservation -- March 1939 -- is listed among ten selected references for elementary, secondary, and collegiate schools in a report on "Conservation Education in the Schools" appearing in Nature Magazine for November 1939.

Required reading for students majoring in wildlife management at the University of Missouri includes the wildlife issue of Soil Conservation.

An abstract of H. H. Bennett's article on "Cooperative Farm Forestry -- Another Avenue to Better Land Use" published in the December issue of Soil Conservation will appear in the January-February issue of Conservation Digest published by the American Forestry Association.

The article on "Farm Drainageways and Outlets" by C. L. Hamilton of the engineering division published in Soil Conservation for January 1939 was reprinted in the September 1939 issue of The Tropical Agriculturist, The Agricultural Journal of Ceylon.

Outdoor America has obtained permission to reprint in a forthcoming issue L. B. Moorhead's article on "Willow Mats Halt Streambank Erosion" published in the November 1939 issue of Soil Conservation.

The Pan American Union reproduced on the cover of the Portuguese edition of its Bulletin for November 1939 and on the Spanish edition's cover for December the cactus illustration on the cover of Soil Conservation for September 1939, giving credit to Adrian Clem the artist who designed the illustration.

REGIONAL PHOTOGRAPHERS MEETING

The regional photographers of the Service met in Washington, D. C., January 15-18 to discuss photographic problems and devise a uniform procedure for handling Service photographs.

George A. Barnes, chief of the division of information, emphasized the need for fewer pictures and better quality photographs. SCS photographs, he said, should not only record technical and physical progress but interpret the conservation program of the Department as it relates to the land and the people who use the land. The value of initiative in photographic work and suggestions for the proper use of pictures were presented to the meeting by Gordon Zimmerman of the division of information and Roy Stryker and Edwin Roskam of the FSA.

A new and more economical classification of pictures and clarification of the photographic program, including photographers' responsibilities, were among the major accomplishments. The meeting closed with an inspection of various laboratories and picture files in Washington.

Photographers attending the meeting were: George Lowary of Region 1, Orin S. Welch of Region 2, George Pace of Region 3, Orville K. Blake of Region 5, Belle C. McLean of Region 6, Richard W. Hufnagle of Region 7, B. Brixner of Region 8, Dale Swartz of Region 9, and Rod Radford of Region 10.

ADMINISTRATIVE ANALYSIS OF WASHINGTON AND REGIONAL OFFICES

The Washington administrative staff has had for some time as one of its objectives a general administrative analysis of both the Washington and regional offices, with a view to determining some of the administrative problems in the Service which warrant immediate consideration, according to F. J. Hopkins, assistant chief in charge of administration.

Several committees, recently authorized by the Chief, are now engaged in making a general analysis of regional office problems as a basis for reporting problems of immediate importance and recommending steps for their solution.

These surveys are not in any way an inspection of any regional office, Mr. Hopkins said. They are an attempt on the part of Washington officials to get much-needed help from the regions in the way of advice and suggestions as to how to approach some of the problems.

Problems which will come up for consideration will be questions of organization, travel, communications, and matters of procedure which, though of minor importance in themselves, may indicate a need for clarification of administrative lines between the regional and Washington offices.

Mr. Hopkins believes that the surveys will help develop a process for analysis of administrative problems -- an analysis which should be a continuing function throughout the Service.

CONSERVATION DISTRICTS

More than a million farms are now included in soil conservation districts organized during the past two years by farmers, J. Phil Campbell, Assistant Chief, reports. An additional 400,000 farms are included in districts now in process of organization.

On the basis of year-end reports, 217 districts covering nearly 120 million acres have been formed in 26 states. More than 100 additional districts are in various stages of formation.

"The phenomenal growth of soil conservation districts is evidence that farmers and ranchers of the United States are beginning to recognize and act upon the acute need for soil and water conservation," Dr. Bennett declared. "Within a few years, soil conservation district laws have been enacted in 36 States, and farmers are seizing the opportunity this legislation gives them to do something about stopping the ruinous waste of soil which is now going on faster than most of us realize."

SOUTHERN AGRICULTURE ASSOCIATION MEETING

The annual meeting of the Association of Southern Agricultural Workers will be held at Birmingham, Ala., February 7-9. H. H. Bennett, Chief, will speak on "Proper Land Use as Related to a Balanced Agriculture." E. A. Norton, chief of the division of physical surveys will address the soil conservation section on "Land Use Capabilities, Adaption and Use."

BOARD OF SUPERVISORS "WELL PLEASED"
WITH DISTRICT WORK

The following letter of appreciation from the Chairman of the Board of Supervisors of the Arkansas-Verdigris Soil Conservation District in Oklahoma was received by H. H. Bennett just before New Year:

Broken Arrow, Oklahoma
December 23, 1939

Dr. H. H. Bennett, Chief
Soil Conservation Service,
United States Department of Agriculture
Washington, D. C.

Dear Sir:

I am enclosing land use capability charts and maps that have been worked out by the district technicians. These have been used as a basis of planning in this district for the past thirteen months. The Board of Supervisors and our Cooperators are in hearty accord with such procedure and feel that their use has enabled our technicians to do an outstanding piece of work.

We are well pleased with the progress of district work. We feel that the signing of two hundred cooperative agreements totaling more than 30,000 acres is a fine piece of work. However, it is the wonderful cooperation being given by the farmers and the speed of execution on the part of the farmers that makes the work outstanding in this district. We feel sure that recognition of proper land use in planning has been a great incentive to proper compliance.

We are looking forward and making plans for a great year in 1940.

Yours very truly,

/s/ F. S. Hurd
Chairman,
Board of Supervisors

RAPID PROGRESS REPORTED FOR CRAB ORCHARD PROJECT

Owing to excellent weather conditions last fall, the work to be completed on the Crab Orchard Land Utilization project is being carried out ahead of schedule, according to recent reports from R. H. Musser, regional conservator for the Upper Mississippi region.

The project, which is located in Williamson County, Ill., was initiated by the Resettlement Administration in 1936, and transferred to the Soil Conservation Service in the fall of 1938 with the reorganization of the Department of Agriculture. Up to the beginning of the present fiscal year the major item of work on the project consisted of construction of the large earth dam which, when closed, would impound a lake of about 8,000 surface acres.

As of July 1, 1939, the work to be done before the lake could be filled consisted of the construction of five main roads across or around the lake bed, clearing of timber and brush from the lake site, and the removal of five cemeteries.

Reports from Mr. Musser indicate that construction of roads has progressed to the point where they no longer delay the closing of the dam, and that the reservoir clearing work will be finished about February 28. The removal of the cemeteries is not being considered by the District Federal Court and a decision is expected soon.

In order to make the area adjacent to the lake usable for recreational purposes, a State WPA project has been established, sponsored by the Soil Conservation Service, to provide day-use recreational facilities, including a bath-house, bathing beach, water and waste systems, boat landings, and picnic areas. The program of developmental work now under way is scheduled for completion by June 30, 1940.

POLITICAL ACTIVITY

A recent circular letter from Roy F. Hendrickson, director of personnel of the Department, says that information concerning political activity and including interpretations of the Hatch Act will shortly be ready for distribution.

"Meantime, however," continues Mr. Hendrickson, "inquiries have been forwarded concerning the propriety of the participation of employees in some types of political gatherings, including Jackson Day dinners, Lincoln Day dinners, and similar events. There is

nothing in the law which prohibits an employee from attending such dinners or making contributions to the campaign fund of any political dinner or gathering. The Act of August 2, 1939, however, prohibits all employees of the Government generally from taking any active part in political management or in political campaigns, including the solicitation of political contributions. In addition, there are specific provisions of the Criminal Code which prohibit any employee from soliciting or being directly or indirectly concerned with the solicitation of political contributions from any other employee, and which prohibit any person, whether employed by the Government or not, from soliciting political contributions in a Federal building. Soliciting the purchase of tickets or invitations to a political dinner or gathering is regarded as a solicitation of political contributions.

"To sum up, therefore, employees of the Department are permitted to make voluntary contributions to a political campaign fund or voluntarily to purchase tickets or invitations to political dinners and functions, but they must not solicit or receive such contributions or sell such tickets or invitations, and in no case shall such solicitations (that is, even by persons not employed by the Government) take place in a Federal building."

SCS MEN HONORED

W. C. Lowdermilk, assistant to the chief, has been appointed counsellor of the Near East Foundation of New York City and has also been appointed a member of the editorial staff of the Annales Agronomiques of France.

Arthur C. McIntyre, chief of Region 1 division of forestry, was elected to the Council of the Society of American Foresters at their 1939 national election.

PRINTERS' INK

In discussing the soil conservation program on the Crooked Creek Project, Pa., David H. Walter, project supervisor for the economic research division with headquarters at State College, Pa., states that "farmers who have followed the soil conservation program made a greater increase in labor incomes over the 4-year period (1934-1938) than the non-cooperators."

Mr. Walter's article, entitled "Soil Conservation," appears in Pennsylvania Farm Economics for November, 1939.

The net increase in labor income in favor of Soil Conservation Service cooperators, after deducting the Agricultural Conservation Program payments and a fair charge for materials furnished by the

Government, was: large dairy farms, \$228; small dairy farms, \$107; poultry farms, \$75; and general farms, \$11.

"Of much greater importance," writes Mr. Walter, "is the fact that the farm has been placed on a more permanent productive basis by a land use plan that will reduce soil losses."

Because of the widespread interest in economic material, Mr. Walter's article is reproduced here, in its entirety.

SOIL CONSERVATION

Farmers today are reading and hearing much about soil conservation and the value of soil saving methods of farming. There is little doubt that if soil is worth anything at all it is worth saving. One question a farmer must decide is whether he can carry out his farming operations under a soil conserving system and maintain a satisfactory income as compared to his old system.

In the Crooked Creek watershed in Indiana and Armstrong counties, the Soil Conservation Service has cooperated with many of the farmers in carrying out a program on their farms. These plans were made in 1935 and in the early part of 1936. In conjunction with the program detailed studies were made of farm incomes for both cooperators and non-cooperators in 1934 and in 1938.

These studies indicate that the farmers who have followed the soil conservation program made a greater increase in labor incomes over the 4-year period than the non-cooperators, see table. The net increase in labor income in favor of the Soil Conservation Service cooperators, after deducting the Agricultural Conservation Program payments and a fair charge for materials furnished by the Government, was: large dairy farms, \$228; small dairy farms, \$107; poultry farms, \$75; and general farms, \$11.

Very little, if any, of this increase in income can be attributed to saving the soil over such a short period of time, but primarily to the change in land use and farm management practices on these farms. This indicates that these farmers can operate under the recommended soil conserving system without a reduction of income. Of much greater importance is the fact that the farm has been placed on a more permanent productive basis by a land use plan that will reduce soil losses.

-David H. Walter.

Labor incomes on 102 farms in 1934 and 1938, by type of farm and by cooperation with Soil Conservation Service, Crooked Creek Project, Pa.

| ITEM | <u>Small Dairy</u> | | <u>Large Dairy</u> | | <u>Poultry</u> | | <u>General</u> | |
|---|--------------------|----------|--------------------|----------|----------------|---------|----------------|----------|
| | SCS* | Non-SCS* | SCS | Non-SCS* | SCS | Non-SCS | SCS* | Non-SCS* |
| Number of farms | 11 | 17 | 18 | 10 | 3 | 8 | 15 | 20 |
| Labor income in 1938 without SCS & ACP ** contributions | -141 | -227 | +278 | +310 | -44 | -67 | -227 | +21 |
| Labor income 1934 | -250 | -229 | +87 | +347 | -120 | -68 | -303 | -44 |
| Change in labor income from 1934 to 1938 | +109 | +2 | +191 | -37 | +76 | +1 | +76 | +65 |
| Net increase for SCS cooperators | +107 | | +228 | | +75 | | +11 | |

* Soil Conservation Service

** Agricultural Conservation Program

In an article entitled "The Eleventh Commandment," in the January issue of American Forests, W. C. Lowdermilk suggests that if Moses had foreseen the wastages of land and natural resources that have taken place since his time, he might have written an eleventh commandment. Such a commandment, Dr. Lowdermilk believes, might have read somewhat as follows:

"XI. Thou shalt inherit the holy earth as a faithful steward, conserving its resources and productivity from generation to generation. Thou shalt safeguard thy fields from soil erosion, thy living waters from drying up, thy forests from desolation, and protect thy hills from overgrazing by thy herds, so that thy descendants may have abundance forever. If any shall fail in this stewardship of the land thy fruitful fields shall become sterile stony ground and wasting gullies, and thy descendants shall decrease and live in poverty or be destroyed from off the face of the earth."

An article on "Erosion: A Heritage from the Past" by Lois Olson, head of the erosion history section was published in Agricultural

History for October 1939. Miss Olson traces the history of agriculture, with its subsequent erosion, from the Tigris-Euphrates Valley "before the dawn of recorded history" through the Near East, North Africa, and Europe to present day United States.

Mimeographed copies of this article will shortly be available for distribution.

An article entitled "The Hazard of Basing Permanent Grazing Capacity on Bromus Tectorum," by George Stewart of the Forest Service and A. E. Young, SCS assistant range examiner at Malad City, Idaho, was published in the December 1939, issue of the Journal of the American Society of Agronomy.

The economic hazard involved when the perennial grazing capacity is based on the fall-annual downy chess grass, locally known as cheat-grass, consists of two elements, (1) the wide variations in forage production from one year to another, and (2) the uncertainty as to whether there will occur any production great enough in volume to serve as a basis for livestock grazing.

The discussion is broken down under headings on the ecological history, distribution and economic importance, range survey of Gem County, Idaho, data obtained by re-examination, perennials vs. annuals for forage, and data from Boise National Forest.

"Dispersion of Lateritic Soils and the Effect of Organic Matter on Mechanical Analysis" by O. W. Beale of the division of research at Clemson, S. C., was published in Soil Science for December 1939.

In an article entitled "Promising New Cash Crop for Hill Lands," appearing in the January issue of Progressive Farmer, Ozell A. Atkins discusses the merits of the dryland blueberry (vaccinium vacillans) as an erosion-resistant hillside crop. Mr. Atkins is supervisor of the hillculture research project at Auburn, Ala.

RECENT PUBLICATIONS

USDA Farmers' Bulletin No. 1836. "Saving Soil With Sod in the Ohio Valley Region." Kenneth Welton, assistant regional conservator.

Unnumbered publication. "Erosion Losses From a 3-Day California Storm." John G. Barnesberger, regional engineer.

USDA Circular No. 534. "Lespedeza Sericea and Other Perennial Lespedezas for Forage and Soil Conservation." A. J. Pieters, formerly with the division of conservation operations.

USDA Circular No. 536. "The Annual Lespedezas as Forage and Soil-Conserving Crops." A. J. Pieters, formerly with the division of conservation operations.

USDA Leaflet No. 190. "Mulching to Establish Vegetation on Eroded Areas of the Southeast." Sydney Franklin, area biologist.

Michigan State College Extension Bulletin No. 203. "Conserving Soil By Better Land-Use Practices." Paul M. Barrett, soil conservation specialist at Michigan State College.

SOIL CONSERVATION DISTRICTS

As of January 30, the Department has entered into a memorandum of understanding with 165 soil conservation districts in 25 states. One hundred and twenty-eight supplemental memoranda of understanding have been executed making available SCS equipment and planting materials and 107 supplemental memoranda of understanding have been signed making available CCC camp labor, equipment, and materials.

The story on page 9 includes districts organized as well as those that have already entered into memoranda of understanding with the Department.

WINONA MONOGRAPH USED IN COLLEGE CLASS WORK

Dr. Gustav Swanson, professor of economic zoology and wildlife management at the University of Minnesota, is using in his classroom work the Winona project monograph, shortly to be published. A letter from L. R. Combs, information chief for Region 5, tells us that Dr. Swanson finds the monograph "the best adapted material that he has found because it deals specifically with a certain area with which his students are somewhat familiar."

NOTE ON TERRACING BULLETINS

Farmers' Bulletin No. 1789, "Terracing For Soil and Water Conservation" by C. L. Hamilton of the division of engineering, has proved one of the most popular publications issued by the SCS. Over 130,000 copies were distributed in the past year and a half.

A companion to F. B. 1789, called "Terrace Outlets and Farm Drainageways" by the same author, was issued last July as Farmers' Bulletin 1814. Although it brings terracing information up to date, F. B. 1814 is not nearly so popular as its predecessor was. Only 31,000 copies have been requested to date.

GRADUATE COURSE FOR REGION 1

The USDA Graduate School is conducting an experiment this semester in which SCS employees at Upper Darby are the guinea pigs. Sponsored by the SCS regional office, a course in principles of administrative management is presented at Upper Darby. It is an exact duplication of the course conducted by the Graduate School at Washington with emphasis on the fields of organization, personnel management, and financial management.

Dr. Eldon L. Johnson, Graduate School Instructor, journeys to Upper Darby from Washington each Friday to lecture to the class. Credit for the 15-session course will be certified by the Graduate School to any standard college. Of the 31 students enrolled, 28 are SCS employees.

It is worth noting that the Graduate School of the Department is willing to present courses given by the school wherever a sufficient number of employees enroll, provided a competent instructor is available.

LIBRARY NOTES

The Christmas holidays notwithstanding, the Library reports a larger circulation of books and periodicals in December than in any previous month of its existence. Dr. Bennett's new book "Soil Conservation" is most frequently called for, with Armin K. Lobeck's "Geomorphology" running a close second.

A list of references on "Stream and River Bank Protection" has recently been compiled in the Library. A small number of copies have been dittoed and are available to those who have particular need for such a list.

RECENT FILM STRIPS

New film strips now available for distribution through the division of information are:

No. 568. "Conserving Southwestern Ohio Soil." Prepared by E. P. Reed, Dayton, Ohio. 39 frames.

No. 570. "Farm Woods -- A Safe Crop For Steep Land, Upper Mississippi Valley." Prepared by W. H. Lathrop, Milwaukee, Wis. 31 frames.

No. 572. "Corn Belt Farmers Fight Erosion." Prepared by Region 5 personnel. 43 frames.

THE STENOGRAPHIC POOL

The Washington stenographic pool, under the supervision of Helen M. West, was recently revived to supply stenographic help during peak load and emergency periods.

A more important function of the pool, however, is the training of new stenographers in the policies and program of the Service. A series of lectures has been arranged; each week a division or section head outlines the work under his supervision for the newcomers' benefit. The policy of sending new stenographers on detail for periods of a few days or weeks to different offices also helps them to understand the aims of the Service as a whole.

The pool members are enthusiastic about the benefits of the training program. They find that much of the confusion which usually attends breaking in on a new job has been eliminated.

PERSONNEL CHANGES

William Guy Kincannon was transferred from Cayey, Puerto Rico to St. Croix, Virgin Islands to take charge of conservation work on the Islands.

Harold G. Anthony, formerly head of the visual information unit, will be head of the press and radio unit of the division of information.

Paul L. Bissell, in charge of information for the CCC organization of the SCS, will replace Mr. Anthony in visual information work.

Harold B. Martin, formerly area conservationist at Minden, La., has been transferred to Baton Rouge, La., as acting State Coordinator, to fill the vacancy occasioned by the death of Guy K. Fletcher.

Louis Brandt of the engineering division has been "loaned" for four months to the Prebuilt Housing Corporation of New York to assist in working out plans for low-cost houses.

Harley J. Helm, chief of the division of range conservation for Region 10, has been detailed to Washington, D. C., for 30 days to assist in developing planning procedures for range lands.

VISITORS FROM EUROPE

Dr. Jean Dufrenoy of the University of Bordeaux, France, who is in the United States lecturing on plant pathology, recently visited the Washington office of the SCS. During his stay in the United States, Dr. Dufrenoy will visit various SCS projects to become familiar with the work of the Service.

Another visitor was Dr. W. C. Cochran, formerly of the Rothamsted Experiment Station, England. Dr. Cochran just delivered a series of lectures on statistical methods under the auspices of the USDA Graduate School.

MANUSCRIPTS

As of January 30, 1940, the status of manuscripts submitted for publication is as follows:

| Series | Title | Author | Remarks |
|------------------|--|--|---|
| Tech.Bul. 639 | The Effect of Accelerated Erosion on Silting in Morena Reservoir, San Diego, Calif. | Barnes, Kraebel, and LaMotte | Returned 12-5-39 to G.P.O. in page proof |
| Tech.Bul. 698 | Rainfall Characteristics as Related to Soil Erosion | D.I.Blumenstock | Returned 11-21-39 to G.P.O. in page proof |
| Tech.Bul. | Relative Infiltration and Related Physical Characteristics of Certain Soils | Free, Browning, and Musgrave | Sent to G.P.O. 1-22-40 |
| Tech.Bul. 695 | Some Principles of Accelerated Stream and Valley Sedimentation as Exemplified in LaFayette County, Miss. | Happ, Rittenhouse, and Dobson | Returned 11-30-39 to G.P.O. in galley proof |
| Circ. | Processing Seed of Grasses and Other Plants to Remove Awns and Appendages | Schwendiman, Sackman, and Hafenrichter | Sent to G.P.O. 12-13-39 |
| Circ.546 | Putting Down and Developing Wells for Irrigation | Carl Rohwer | Returned 1-17-40 to G.P.O. in page proof |

| Series | Title | Author | Remarks |
|------------------|--|---|--|
| Circ. | Review and Discussion of Literature Pertinent to Crop Rotations for Erodible | C. R. Enlow | Sent to G.P.O. 12-20-39 |
| Far.Bul. 1833 | Crops Against the Wind on the Southern Great Plains | Glenn K. Rule | Returned 12-8-39 to G.P.O. in page proof |
| Far.Bul. 1840 | Kutzu for Erosion Control in the Southeast | R. Y. Bailey | Returned 11-29-39 to G.P.O. in second page proof |
| Far.Bul. 1843 | Soil Defense in the Pacific Southwest | G.K.Rule and R.W.Netterstrom | Sent to G.P.O. 1-4-40 |
| Far.Bul. | Supplemental Irrigation | F. E. Staetner | 9-25-39--Sent to U.S.D.A.-- Not to printer |
| Misc.Pub. 380 | Snow Surveying | James C. Marr | 1-19-40--Sent to G.P.O. |
| Misc.Pub. 372 | A Survey and Discussion of Lysimeters and a Bibliography on their Construction and Performance | Helmut Kohnke, F.R.Dreibelbis, and J.M.Davidson | Now in Editorial Office in galley proof |
| Leaf.188 | Protecting Field Borders | Verne E.Davidson | Returned 11-29-39 to G.P.O. in page proof |
| Un.Pub. | Land-Saving Plans ... for Conservation in the Pacific Southwest | Soil Cons.Serv. | Returned 1-4-40 to G.P.O. in page proof |
| Folder | Land Use and Soil Conservation | Soil Cons.Serv. | 12-6-39--Sent to G.P.O. |

| Series | Title | Author | Remarks |
|------------------|---|---------------------------|---|
| Un.Pub. | Use the Land and Save the Soil | Soil Cons.Serv. | 12-11-39--Sent to U.S.D.A.-- Not to printer |
| Erosion Surveys: | | | |
| | Erosion and Related Land Use Conditions on the -- | | |
| | Conestoga Area, Pa. | Bonsteel and Bass | 12-12-39--Sent to U.S.D.A.-- Not to printer |
| | Hell and Mud Creeks Demonstration Project, Miss. | D. T. Webb | 9-27-39--Sent to G.P.O. |
| | Lake Crook Watershed, Lamar County, Texas | Harvey Oakes | 11-14-39--Sent to G.P.O. |
| | Lake Michie Watershed, N.C. | Martin and Bass | Returned 12-26-39 to G.P.O. in page proof |
| | Lloyd Shoals Res. Watershed, Ga. | P.H.Montgomery and others | Returned 12-20-39 to G.P.O. in page proof |
| | Mad River Watershed, Vermont | C.H. Atkinson | 10-30-39--Sent to G.P.O. |
| | Spartanburg Municipal Reservoir Watershed, S.C. | Bass and Martin | Returned 12-6-39 to G.P.O. in page proof |
| | University Lake Watershed, Chapel Hill, N.C. | Bass and Martin | Returned 12-7-39 to G.P.O. in page proof |

CCC IMPROVED HEALTH RECORD

A recent War Department report to the CCC Director shows the past fiscal year was the healthiest in the history of the CCC. The year 1939

saw a sharp decline in cases of pneumonia, typhoid, scarlet fever, diphtheria, and tuberculosis.

Voluntary use of new vaccines, better sanitation, and better drinking water are considered responsible for this decrease.

PASTURE IMPROVEMENT FILMED BY
FERTILIZER ASSOCIATION

"Green Acres," an all-color, 16-millimeter motion picture to be used in agricultural education, has been completed by the National Fertilizer Association. It is a two-reel story of pasture improvement and management.

State Experiment Stations, the U. S. Department of Agriculture, and farmers cooperated with the Association in making the picture. It emphasizes the importance of improved pastures in producing cheap, high-quality feed; in providing earlier, more uniform, and later grazing; the necessity for supplemental grazing crops; the desirability of producing hay and silage from surplus grass; and the part that improved pasture can play in the control of soil erosion.

Prints will be loaned to agricultural colleges, county agricultural agents, and other organizations interested in better farming.